

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 **Claim 1 (currently amended):** A heating apparatus
2 comprising:

3 an infrared ray lamp including a heating element which
4 has a substantially plate shape, ~~which is formed of a~~
5 ~~linier-shaped carbon-based substance of which a cross-~~
6 section of which is a rectangular shape, and which is
7 hermetically sealed in a glass tube, and

8 a reflection plate which is disposed so as to keep a
9 predetermined distance from outside of said glass tube of
10 said infrared ray lamp,

11 ~~wherein said reflection plate is disposed so that an~~
12 ~~inner reflection face of said reflection plate is opposed~~
13 ~~to an arbitrary portion of said heating element, and is~~
14 ~~structured such that an object to be heated is disposed in~~
15 ~~the front position opposing said reflection face of said~~
16 ~~reflection plate~~

17 wherein said heating element has a width which is
18 larger than a thickness thereof by five times or more, and
19 is formed of a carbon-based substance consisting at least
20 of crystallized carbon, a resistance value adjustment
21 substance and amorphous carbon,

22 wherein said reflection plate has at least a similar
23 length as that of the infrared ray emitting portion of said
24 heating element, is disposed in parallel with the center
25 line in the longitudinal direction of said heating element,
26 and has a substantially arcuate shape using the center line
27 of said heating element as a center thereof, and

28 wherein a reflection face of said reflection plate
29 that opposes said heating element is disposed so as to be
30 opposed to one of the wider side portions of said heating
31 element.

Claim 2 (canceled)

1 **Claim 3 (currently amended):** A heating apparatus ~~in~~
2 ~~accordance with claim 1~~ comprising:

3 an infrared ray lamp including a heating element which
4 has a substantially plate shape, of which cross-section is
5 a rectangular shape, and which is hermetically sealed in a
6 glass tube, and

7 a reflection plate which is disposed so as to keep a
8 predetermined distance from outside of said glass tube of
9 said infrared ray lamp,

10 wherein said heating element has a width which is
11 larger than a thickness thereof by five times or more, and
12 is formed of a carbon-based substance consisting at least
13 of crystallized carbon, a resistance value adjustment

14 substance and amorphous carbon,
15 wherein said reflection plate has at least a similar
16 length as that of the infrared ray emitting portion of said
17 heating element, is disposed in parallel with the center
18 line in the longitudinal direction of said heating element,
19 and has a substantially arcuate shape using the center line
20 of said heating element as a center thereof, and
21 wherein the reflection face of said reflection plate
22 that opposes said heating element is disposed so as to be
23 ~~that an inner reflection face of said reflection plate is~~
24 ~~opposed to one of the narrower side portions of said~~
25 ~~heating element.~~

1 **Claim 4 (currently amended):** A heating apparatus in
2 accordance with ~~any one of claims 1 to 3~~ claim 1 or 3,
3 wherein said reflection plate ~~provided in said heating~~
4 ~~apparatus is disposed substantially in parallel with the~~
5 ~~longitudinal direction of said heating element disposed in~~
6 ~~front of said reflection plate, and such that the end~~
7 ~~portions in the longitudinal direction of said heating~~
8 ~~element are arranged in a substantially straight line with~~
9 ~~said heating element or said glass tube interposed having~~
10 a substantially arcuate shape is disposed so that both ends
11 of said reflection pate in a direction orthogonal to the
12 longitudinal direction thereof is arranged on a plane
13 including the center line of said heating element.

1 **Claim 5 (currently amended):** A heating apparatus in
2 accordance with ~~any one of claims 1 to 3~~ claim 1 or 3
3 wherein a cross-section of said reflection plate has a
4 substantially arcuate shape formed of a combination of
5 plural straight lines, such as a part of a polygon.

1 **Claim 6 (currently amended):** A heating apparatus in
2 accordance with ~~any one of claims 1 to 3~~ claim 1 or 3
3 wherein said reflection plate is configured so as to
4 reflect radiant heat from said heating element and diffuse
5 [[a]]the radiant heat to the front of said infrared ray
6 lamp ~~to the front~~.

Claims 7-38 (canceled)